WHAT IS CLAIMED IS:

1. A method for determining harmonics of repeatable runout error during disk drive operation, such that correction of the error by feed forward techniques is facilitated, comprising:

    using at least one algorithm to determine at least one RRO error harmonic based on a number of disk fasteners.

2. The method of Claim 1, further comprising using an output of the algorithm to establish a feed forward signal to a head positioning assembly to correct repeatable errors.

3. The method of Claim 2, wherein the algorithm is established at least in part by n+m=NS, 2NS, 3NS,..., wherein NS is the number of periodically-spaced fasteners, n is a wave number of disk deformation, and m is a harmonic number induced by the NS fasteners to cause the disk to deform with wave number equal to n.

4. The method of Claim 2, wherein the algorithm is established at least in part by the magnitude of |n-m| = NS, 2NS, 3NS,..., wherein NS is the number of periodically-spaced fasteners; n is a wave number of disk deformation, and m is a harmonic number induced by the NS fasteners to cause the disk to deform with wave number equal to n.

5. A hard disk drive, comprising:

    at least one disk susceptible to RRO error;

    at least one error correction circuit to cancel RRO error; and

    at least one input representing algorithmically determined RRO error harmonics based on a number of fasteners used to hold the disk.

6. The disk drive of Claim 5, wherein the screws hold the disk to a spindle.

7. The disk drive of Claim 5, wherein the RRO error is determined by an algorithm established at least in part by n+m=NS, 2NS, 3NS,..., wherein n is a wave number, m is a harmonic number, and NS is the number of fasteners.

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8.   The disk drive of Claim 5, wherein the RRO error is determined by an algorithm established at least in part by the magnitude of |n-m| = NS, 2NS, 3NS,..., wherein n is a wave number, m is a harmonic number, and NS is the number of fasteners.

9.   A system, comprising:
at least one disk;
an integer number of screws holding the disk to a rotating component;
at least one head positioning assembly positioning a head over a disk;
at least one error correction circuit controlling the head positioning assembly in response to an error signal; and
at least one error signal generation component generating the error signal at least in part based on the number of screws.

10.   The system of Claim 9, wherein the error signal generation component uses at least one algorithm to generate the error signal, the error signal being an RRO error signal.

11.   The system of Claim 10, wherein the RRO error signal is determined by an algorithm established at least in part by n+m=NS, 2NS, 3NS,..., wherein n is a wave number, m is a harmonic number, and NS is the number of fasteners.

12.   The system of Claim 10, wherein the RRO error signal is determined by an algorithm established at least in part by the magnitude of |n-m| = NS, 2NS, 3NS,..., wherein n is a wave number, m is a harmonic number, and NS is the number of fasteners.

13.   A data storage system, comprising:
means for determining harmonics of repeatable runout (RRO) error during disk drive operation to generate an error signal based on a number of disk fasteners; and
means for feeding forward the error signal to cancel the RRO error.

14.   The system of Claim 13, wherein the means for determining at least in part uses

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n+m=NS, 2NS, 3NS,..., wherein n is a wave number, m is a harmonic number, and NS is the number of fasteners.

15.   The system of Claim 13, wherein the means for determining at least in part uses the magnitude of |n-m| = NS, 2NS, 3NS,..., wherein n is a wave number, m is a harmonic number, and NS is the number of fasteners.